



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/796,272

03/10/2004

Kil-soo Jung

1293.1748

9390

49455 7590 05/13/2008

STEIN, MCEWEN & BUI, LLP  
1400 EYE STREET, NW  
SUITE 300  
WASHINGTON, DC 20005

EXAMINER

KHAN, ASHER R

ART UNIT

PAPER NUMBER

4134

MAIL DATE

DELIVERY MODE

05/13/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,272	<b>Applicant(s)</b> JUNG ET AL.	
	<b>Examiner</b> ASHER KHAN	<b>Art Unit</b> 4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/10/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/14/2004;9/30/2004;7/11/2006;2/05/2007;</u>                 | 6) <input type="checkbox"/> Other: _____                          |
| <u>9/25/2007;12/29/2006;</u>   |   |



## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

2. Claims 1-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 1-13 define an information storage medium embodying functional descriptive material. Normally, the claim would be statutory. However, the specification, at page 5 paragraph 69 defines or exemplifies the claimed computer readable medium as encompassing statutory media such as a

"ROM", "hard drive", "optical drive", "DVDs" and etc, as well as *non-statutory* subject matter such as a "signal" i.e. carrier waves.

"A transitory, propagating signal ... is not a "process, machine, manufacture, or composition of matter." Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter." (*In re Petrus A.C.M. Nuijten*; Fed Cir, 2006-1371, 9/20/2007).

Because the full scope of the claim as properly read in light of the disclosure appears to encompass non-statutory subject matter (i.e., because the specification defines/exemplifies a computer readable medium as a non-statutory signal, carrier waver, etc.) the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed tangible computer readable storage media, while at the same time excluding the intangible transitory media such as signals, carrier waves, etc (page 5, paragraph 69). Any amendment to the claim should be commensurate with its corresponding disclosure.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**4. Claims 1-3, 5-6, and 8-13 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Pub. 2003/0012558 A1 to Kim et al ("Kim").**

As to **claim 1**, Kim discloses an information storage medium, comprising: audio visual (AV) data (see figure 1 and paragraphs 0005, 0011-0014); interactive data, which is displayed along with an AV picture (Video picture; paragraph 0011) obtained from the AV data, and provides contents related to the AV picture, when the AV data is reproduced in an interactive mode (paragraphs 0005-0006, 0011-0014); and language information which indicates a language of the contents contained in the interactive data (see paragraphs 0007-0008, 0011-0022).

As to **claim 2**, Kim further discloses wherein the interactive data includes a startup file (Start document file; 0058) to be first read when the interactive mode is selected, and the language information is recorded in the startup file (Figs.5, 6a, 6b, 6c)(0055-0059).

As to **claim 3**, Kim further discloses wherein a reproducing apparatus that reproduces the AV data in the interactive mode refers to the language information to select interactive data (Fig. 5; 0058-0059)(0062-0065)(0071).

As to **claim 5**, Kim discloses an information storage medium comprising: audio visual (AV) data (0005)(0011-0014); a plurality of enhanced audio visual (ENAV) applications (Fig. 2), each of which includes substantially similar contents and is made with a different language from the other ENAV applications, in order to reproduce the AV data in an interactive mode (0047-0051); and language information which is read to select one among the plurality of ENAV applications (Fig. 7) (0062-0065).

As to **claim 6**, Kim further discloses wherein the language information is recorded in a startup file to be first read when the interactive mode is selected (Fig. 5)(0055-0059).

As to **claim 8**, Kim further discloses wherein the language information is recorded using an element which links a loading information file included in a corresponding one of the ENAV applications (Fig. 5)(0021)(0024-0025).

As to **claim 9**, Kim further discloses wherein the language information is recorded in an element that stores a condition selecting a linked loading information file ("DVD\_ENAV\KOR\A.HTM", "DVD\_ENAV\JPN\A.HTM" or "DVD\_ENAV\KOR\A.HTM") included in the element which links the loading information file (Fig. 5)(0021)(0024-0025).

As to **claim 10**, Kim further discloses wherein the language information is recorded using a "name" property (Character Code) and a "value" property ("KR","JP" or "EN-US") in an element that stores a condition selecting a linked loading information file included in the element which links the loading information file (Fig. 5)(0021-0025).

As to **claim 11**, Kim further discloses wherein the language information is recorded using a "name" property and a "value" property in the element that links the loading information file (Fig. 5)(0021-0025).

As to **claim 12**, Kim further discloses wherein the language information is recorded in a language code with two characters according to an ISO 639 standard (Fig. 5)(0056).

As to **claim 13**, Kim further discloses wherein the loading information file ("DVD\_ENAV\KOR\A.HTM", "DVD\_ENAV\JPN\A.HTM" or "DVD\_ENAV\KOR\A.HTM") informs location information of ENAV files belonging to a corresponding one of the ENAV applications (Fig. 5).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**6. Claim 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Pub. 2003/0012558 A1 to Kim et al ("Kim") in view of U.S. Patent Publication 20020078144 to Lamkin.**

As to **claim 4 and 7**, Kim discloses wherein the language information is compared according to a DVD-Video standard in a reproducing apparatus that reproduces the AV data in the interactive mode (0049)(0062).

Kim does not expressly disclose the system parameter SPRM 0 set according to a DVD-video standard.

Lamkin discloses the system parameter SPRM 0 set according to a DVD-Video standard (Page 30, entry 0: "Menu Description Language Code (M\_LCD or AMGM\_LCD)" of first table).



At the time of invention, it would have been obvious to a person of ordinary skill in the art to modified Kim with the teaching of Lamkin. Motivation would have been to incorporate the system parameter SPRM 0 set according to a DVD video standard as disclosed by Lamkin with the apparatus disclosed by Kim, so as to make the apparatus compatible with existing DVD-video standard.

Therefore, it would have been obvious to combine Kim with Lamkin to make the modification as described in claims 4 and 7.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHER KHAN whose telephone number is (571)270-5203. The examiner can normally be reached on Monday-Friday 9:30 am - 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lun Yi can be reached on (571)272-7671. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. K./

Examiner, Art Unit 4134

/LUN-YI LAO/

Supervisory Patent Examiner, Art Unit 4134